City of Fort Smith, Arkansas
Minutes of the Streets, Bridges and Associated Drainage
Capital Improvements Plan (CIP) Advisory Committee Meeting
January 28, 2016

A meeting of the Streets, Bridges and Associated Drainage Capital Improvement Plan (CIP) Advisory Committee was called to order at 12:03 p.m. on January 28, 2016, at the River Park Events Building East by Aaron St. Amant (Chairman).

Committee members present:
- Aaron St. Amant – Ward 3 (Chairman)
- Stan Vlademar – Ward 1
- Tiffinee Baker – Ward 2
- Robert Brown – Ward 3
- Philip Rosar – Ward 4

Committee members absent:
- Tyler Lamon – Ward 2
- David Armbruster – Ward 4

City Staff Present:
- Jeff Dingman, Acting City Administrator
- Stan Snodgrass, Director of Engineering
- Greg Riley, Director of Operations
- Matt Meeker, Senior Project Engineer
- Brian Waldrip, Senior Project Engineer
- Sonya Elliott, Administrative Coordinator
- Jennifer Stevens, Accounting Technician

Minutes of the September 24, 2015 Meeting

Stan Vlademar made the motion to approve the minutes from the September 24, 2015 meeting and Tiffinee Baker seconded. The minutes were approved 5 in favor, 0 opposed.

New Business:

The Chairman explained the purpose of the meeting to the committee. The purpose of the meeting was to discuss preparation of the 5-Year (2017-2021) Capital Improvements Plan, the May-Lecta Neighborhood Overlays – Public Meeting, the Railroad Crossing Panels, Hwy. 45 and Planters Road Intersection Improvements / Traffic Signal and the St. Francis Crest Subdivision – Street Deterioration Review. Stan Snodgrass provided a PowerPoint presentation (attached) for these items and discussed each item in detail with the committee.

Stan Snodgrass advised the CIP Advisory Committee that the Board of Directors approved the 5-Year (2016-2020) Capital Improvements Plan on the October 20, 2015 meeting, with an amendment to Item No. 17 (which was assistance to the Fort Smith Housing Authority for street and drainage construction as part of a proposed residential development). He stated that Item No. 17 was deleted and those funds ($1.1 mil) were transferred to Item No. 1, Street Overlays/Reconstruction. Mr. Snodgrass explained that as a result of that change by the

Board, there were street overlays added to the 5-Year CIP plan which included North 50th between North O and Kelley Highway and South 62nd between Boston and Fresno. These two streets total 1.1 mile, which increased the 2016 overlay/reconstruction from 5.2 miles to 6.3 miles.

Stan Snodgrass let the committee know that intersection improvements at R.S. Boreham Street and Hwy 271 were added to the 2016 plan. He stated that Baldor Electric requested to cost share with the City to provide the necessary intersection improvements. Mr. Snodgrass explained to the committee that Baldor wants to shift their truck access from the intersection of Zero/Boreham Street to Highway 271/Boreham Street, due to safety concerns from the 100 tractor-trailer trucks that serve Baldor daily and the approximately 850 employees that cross R.S. Boreham Jr. Street. The project will include intersection and radius improvements along R.S. Boreham Jr. Street at Highway 271. The estimated cost of these improvements is $350,000 and Baldor has agreed to pay one-half of these costs up to a maximum contribution of $150,000. Baldor has also agreed to donate the public right of way for these improvements. Mr. Snodgrass stated the City's share of the project ($200,000) will be funded from the street sales tax program. This agreement was approved by the Board of Directors in December. Robert Brown wanted to know if there would be any cost sharing from the State on this project. Stan Snodgrass advised that State money not would be received for this project.

Stan Snodgrass advised the committee that the Engineering staff is currently rating city streets. Mr. Snodgrass explained the numerous factors which are considered (including Cracking/Faulting, Alligator Cracks, Rutting, Shoving, Raveling, Ride, Drainage, Excessive Asphalt, Polished Aggregate) and that the staff is a little over 50% complete with rating the nearly 500 miles of city streets. Mr. Snodgrass explained how each street is driven and rated and that the ratings should be completed within the next couple of months. He explained that street rating is not an exact science, but gives a pool of streets to choose from when selecting streets for improvement projects. The Engineering Department plans on compiling streets projects in the next few months for the 2017 program. Mr. Snodgrass asked for input from the committee concurrently with development of the plan, not after it is fully prepared. Robert Brown expressed interest in having more data on cost including design, right of way acquisition and a time line for projects in the next 5-year CIP plan.

Stan Snodgrass discussed having a public meeting for the May-Lecta neighborhood overlays. He stated that a concept drawing is being developed for this area for an open house public meeting likely in mid to late February. He informed the committee that these streets were slated for an overlay about ten years ago and were met with opposition from some members of the neighborhood because they thought the overlay project would cause an increase in speeding traffic. Due to the opposition from the neighborhood, the street overlay project was stopped. Stan Vlademar stated he lives on Lecta and wanted to make the committee aware that he believes there is a speeding problem in his neighborhood. He asked Stan Snodgrass if a 4 way stop would help the current speeding issue. Stan Snodgrass explained that four way stop signs are not a good means for reducing speed and should only be used for intersections where there is significant conflicting traffic in opposing directions. Robert Brown wanted to know if more law enforcement could be present to write tickets. Stan Snodgrass and Jeff Dingman said that additional law enforcement presence was a possibility. Mr. Snodgrass also stated that residents parking on the streets would help with reducing speeders.

Stan Snodgrass advised the committee that the proposed 2016 railroad crossing improvements at two locations on North Street, between Boone and Midland, were replaced by the railroad

companies. One was replaced by A&M with concrete panels, and the other was replaced by FSRR with asphalt and timbers. The City Street department installed asphalt transitions to each. Mr. Snodgrass asked the committee to consider replacing the crossings at North B Street (AR Highway 255) in 2016. Robert Brown asked about cost sharing with the railroads for this project. Stan Snodgrass stated that cost sharing was tried several years ago and was unsuccessful, but there are new people at A&M and they have indicated they would cost share if the City purchases the concrete panels. A&M would then furnish the rail, cross ties, ballast and perform the installation. He also stated that there are upcoming meetings scheduled with FSRR to discuss crossing repairs and cost sharing.

Stan Snodgrass advised the committee that a request had been received from the businesses east of Hwy. 45 for help with traffic signal and intersection improvements at Hwy. 45 and Planters Road. Mr. Snodgrass explained the history of the intersection. He stated there was an agreement in 2006 with Sebastian County and AHTD and that the project started as a basic traffic signal project with no intersection improvements. He stated the project grew from a signal project to an intersection improvements and signal project when they realized a center turn lane on Hwy. 45 and radius improvements to accommodate large truck traffic were needed. Mr. Snodgrass stated the current estimate from the AHTD for this project is approximately $2.0 million including engineering, ROW, utility relocation, traffic signal and construction. Robert Brown wanted to know who would cost share for the project. Stan Snodgrass advised that conversations with AHTD indicate that cost sharing of half of the total cost would accelerate the construction of the project. The cost sharing could include the City, Sebastian County and the businesses requesting the improvements, similar to the cost sharing with Baldor for the intersection improvement at R.S. Boreham Street and Hwy 271. Stan Vlademar questioned if the government's new proposed highway plan would affect this project. Stan Snodgrass advised that he was not aware of any affects the new plan would have on this project.

Stan Snodgrass advised the committee of the street deterioration in the St. Francis Crest subdivision. He stated the streets were constructed in 2005 (10 years old) and have deteriorated faster than expected. He advised the committee that Ark-Con Geotechnical Testing performed soil investigations/testing in six areas along streets in the subdivision. One location did not meet the specifications for subgrade material and two locations were borderline for meeting backfill and subgrade material specifications. Mr. Snodgrass explained that the testing performed indicated the soils were very high in clay material and also contained a high moisture content which likely caused the major deterioration in 10 years. Mr. Snodgrass showed the committee a list of new subdivisions constructed over the last 10 years, totaling nearly 19 miles of new streets. He explained there are not global street base failures in those subdivisions similar to those found in the St. Francis Crest and Brighton Place subdivisions. It was noted that the streets in the St. Francis Crest and Brighton Place subdivision total about 1.8 miles or 10% of the subdivision streets constructed in the last 10 years. Robert Brown wanted to know how the new streets constructed within a new subdivision are supervised. Stan Snodgrass explained that they were supervised privately by the developer's engineer with only very minor inspection by the City. It was noted that upon completion of the subdivision, the developer's engineer had to provide certification that the subdivision was constructed in accordance with the City's specifications and standards. Mr. Brown wanted to know if there was a warranty for the streets once the City took them over. Mr. Snodgrass explained that there is a two year warranty for all streets. Mr. Brown wanted to know if we should upgrade our standards. Mr. Snodgrass explained that the current street design standards are for a 20 year design life which he believes is comparable for surrounding communities in our area.

Stan Vlademar expressed interest in a field trip for the committee members so they could see the streets in Fort Smith before they decided on the 2017 Capital Improvements Plan. Stan Snodgrass indicated that something could be arranged at least with Mr. Vlademar, if not the whole group.

A five minute recess was taken before “Other Business”.

Other Business

Aaron St. Amant passed out an email (attached) from David Armbruster (committee member who was unable to attend the meeting). Aaron St. Amant asked the committee if they had any questions or comments regarding the email that was sent from Mr. Armbruster. No committee members had any questions or comments.

Citizen’s Forum

Jerry Fleming spoke to the committee and stated that Fort Smith has a street crisis on the horizon similar to the current crisis with the sanitary sewer system. He passed out information (attached) to the committee members and spoke to them regarding his concerns for the Capital Improvement Program. He requested the committee meet more frequently and he would like them to look at changing the subdivision design standards to a higher level. Robert Brown agreed that the committee needed to meet more frequently. Mr. Brown would like to know the cost of changing standards for subdivision street construction. Jerry Fleming commented that the City is doing a great job, but they just don’t have the funds to address every street in the city. Aaron St. Amant asked how long the streets should typically last. Stan Snodgrass advised that the street surface would typically last between 20 and 30 years but this can vary greatly depending on numerous factors. Kent (citizen) asked the committee to raise the design standards for subdivisions and said the streets in this area did not seem to be constructed to the same standards as those he saw while living in California. Jerry Fleming told the committee that changing design standards was not the only solution and that they needed to find ways to stretch the money spent on street repairs now by means such as slurry or seal coating the streets instead of just overlaying the streets. Kent (citizen) said that in California they use triangular rocks in conjunction with a seal coating and the rocks are beat into the cracks. Matt Meeker (Project Engineer) told Mr. Fleming that he disagreed there was a street crisis and said that we are not finding many streets in the field that are in extremely bad condition when determining street overlays each year. Stan Snodgrass asked that the committee please help identify city streets in poor conditions that needed resurfacing. Matt Meeker asked Greg Riley about closing cracks on the streets. Mr. Riley said that there are many products on the market.

Robert Brown asked Greg Riley about the sidewalks along Rogers Avenue. Mr. Riley informed him and the committee that it has been in the design phases and should begin construction soon.

Aaron St. Amant said he would contact the committee members and determine when they would like to meet again.

With no further business, the meeting was adjourned at 2:04 p.m.

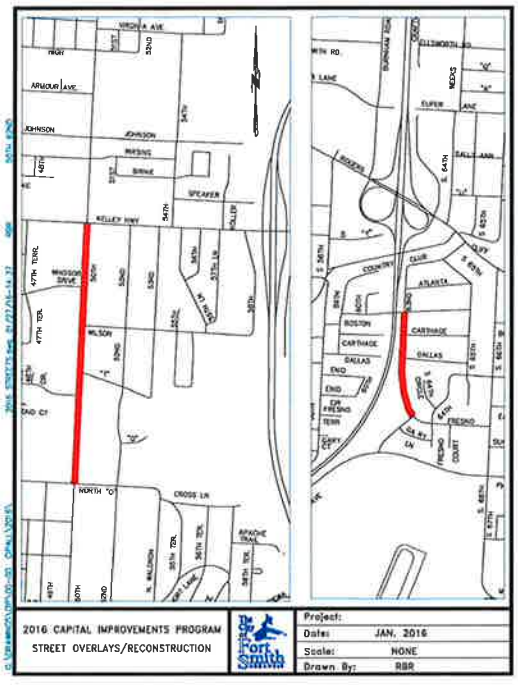
CITY OF FORT SMITH As Amended 10/21/15

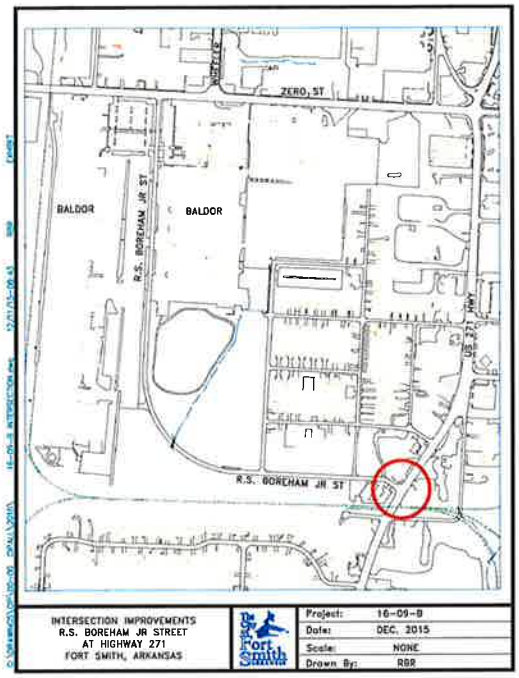
Five-Year Capital Improvement Program for Streets, Bridges and Drainage (2016-2020)

		2015	2016	2017	2018	2019	2020
	Beginning Balance	28,153,502	28,854,231	20,936,441	6,834,496	2,765,596	932,404
	Current Year Revenues						
	Sales Tax	21,011,900	21,537,198	22,075,627	22,627,518	23,193,206	23,773,036
	Grants/Other Participation	525,081	5,053,630	2,165,429	0	0	0
	Interest	99,542	111,564	63,854	23,940	9,222	2,815
	Total - Current Year Revenues	21,636,523	26,702,391	24,304,911	22,651,459	23,202,428	23,775,851
	Total Funds Available	**49,790,025**	**55,556,622**	**45,241,352**	**29,485,956**	**25,968,024**	**24,708,255**
1	Street Overlays & Reconstruction	7,834,300	7,199,504	7,415,354	8,000,000	8,000,000	8,000,000
2	Neighborhood Drainage Improvements	3,918,582	6,316,670	6,500,000	2,015,000	2,000,000	2,000,000
3	Town Branch / Carnall Drainage	2,769,876	0	0	0	0	200,000
4	North B Truck Route	20,000	1,074,000	700,000	0	0	0
5	Intersection and Signal Improvements	509,921	825,000	570,000	400,000	400,000	400,000
6	Spradling Extension at Riverfront Drive	0	1,405,000	0	0	0	0
7	Kelley Highway Extension to Riverfront Drive	350,000	800,000	677,000	3,000,000	4,000,000	0
8	Jenny Lind Road - Zero to Cavanaugh	296,745	10,132,540	12,000,000	7,015,000	0	0
9	Geren Road Reconstruction	150,000	1,213,000	5,325,000	0	0	0
10	Zero Street (Hwy 255)	0	0	0	800,000	0	4,000,000
11	May Branch Drainage Project	0	300,000	800,000	1,000,000	6,000,000	5,000,000
12	Levee Certification & Repair	266,293	0	0	0	0	0
13	Streetscape - Towson Avenue	105,000	0	0	0	0	0
14	FCRA Development	1,348,077	2,053,977	1,000,000	1,000,000	1,000,000	1,000,000
15	Hwy 45 widening south of Zero	0	0	0	0	0	200,000
16	Railroad Crossing Panels	301,940	160,000	160,000	160,000	160,000	160,000
17	Item Deleted. Funds transferred to Item 1	0	0	0	0	0	0
18	Traffic Studies	21,016	25,000	25,000	25,000	25,000	25,000
19	Overlays/Drainage by Street Department	188,560	200,000	200,000	200,000	200,000	200,000
20	Engineering Dept. and Other Depts.	2,698,000	2,765,400	2,834,500	2,905,360	3,050,620	3,126,890
21	Contingency	157,484	200,000	200,000	200,000	200,000	200,000
	TOTAL	**20,935,794**	**34,620,181**	**38,406,854**	**26,720,360**	**25,035,620**	**24,511,890**
	Ending Balance	**28,854,231**	**20,936,441**	**6,834,498**	**2,765,596**	**932,404**	**196,365**

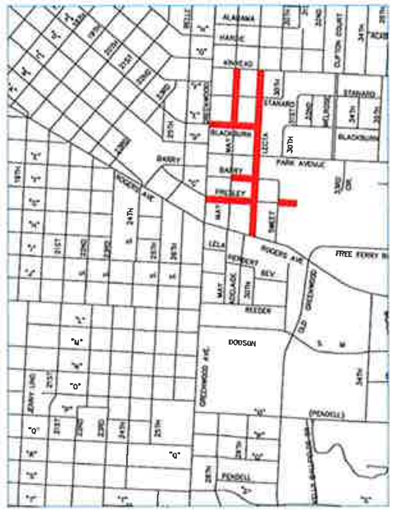
Grants/Other Participation

	Jenny Lind Road - Zero to Cavanaugh	49,542	4,000,000	2,165,429	0	0	0
	Streetscape - Towson	0	190,641	0	0	0	0
	FCRA	475,539	862,989	0	0	0	0
	TOTAL	**525,081**	**5,053,630**	**2,165,429**	**0**	**0**	**0**

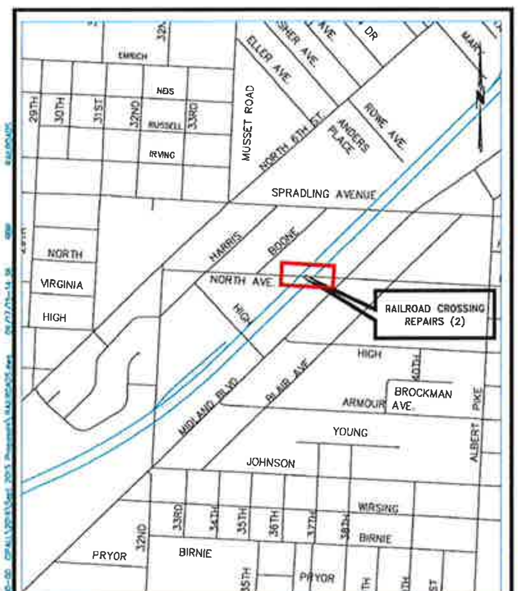




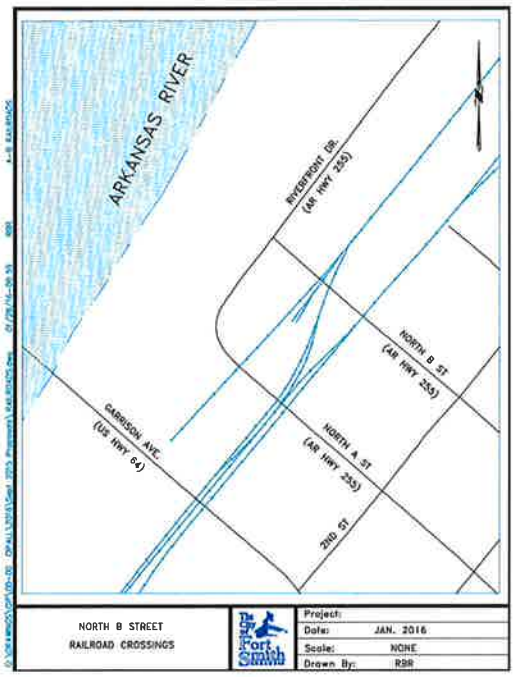
Preparation of 5 year (2017-2021) Capital Improvement Plan

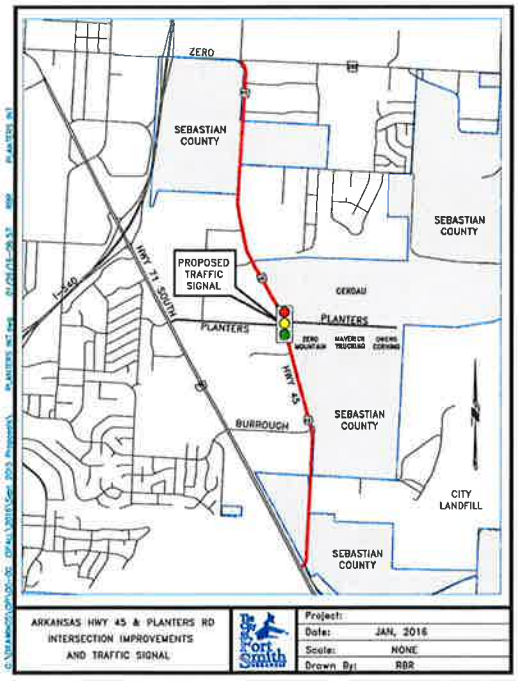


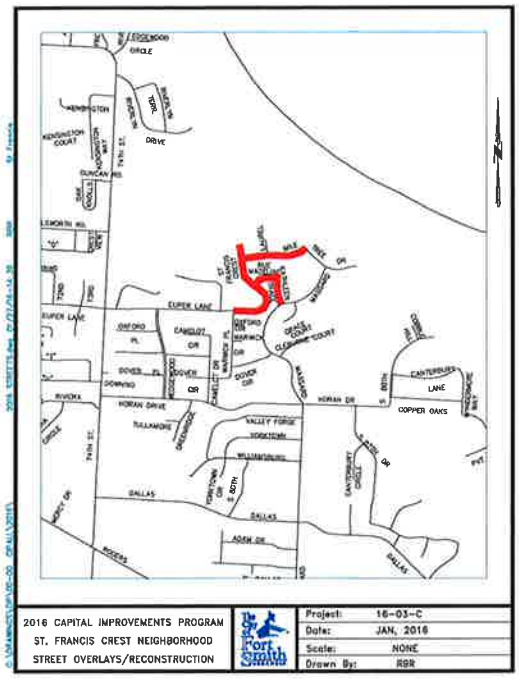
2016 CAPITAL IMPROVEMENTS PROGRAM MAY – LECTA NEIGHBORHOOD STREET OVERLAYS/RECONSTRUCTION	Fort Smith	Project:	16-03-B
		Date:	JAN. 2016
		Scale:	NONE
		Drawn By:	RBR



2016 CAPITAL IMPROVEMENTS PROGRAM RAILROAD CROSSING IMPROVEMENTS	Fort Smith	Project:		
		Date:	SEPT. 2015	
		Scale:	NONE	
		Drawn By:	RBR	PAGE: 27


ARKANSAS RIVER
RIVERFRONT DR.
(AR HWY 255)
NORTH B ST
(AR HWY 255)
NORTH A ST
(AR HWY 255)
GARRISON AVE.
(US HWY 64)
2ND ST
NORTH B STREET
RAILROAD CROSSINGS
Project:
Date: JAN. 2016
Scale: NONE
Drawn By: RBR


ZERO
SEBASTIAN COUNTY
SEBASTIAN COUNTY
PROPOSED TRAFFIC SIGNAL
I-540
HWY 71 SOUTH
PLANTERS
CEKDAU
PLANTERS
ZERO MOUNTAIN
MAYER DE TRUCHAD
OWENS CORNING
HWY 45
BURROUGH
SEBASTIAN COUNTY
CITY LANDFILL
SEBASTIAN COUNTY
ARKANSAS HWY 45 & PLANTERS RD
INTERSECTION IMPROVEMENTS
AND TRAFFIC SIGNAL
Project:
Date: JAN. 2016
Scale: NONE
Drawn By: RBR



Subdivisions Constructed Since 2005

	Subdivision Name	Date	Miles
1	Southfield Heights Phase I	2005	1.0
2	St. Francis Crest	2005(1)	0.9
3	Fairway Hamlet	2005	0.1
4	Wilson Oaks	2005	0.4
5	South Meadows Estates	2006	1.8
6	Williamson Place	2006	1.6
7	Walnut Park, Phase 1	2006	0.4
8	Lakeview Heights	2006	0.4
9	Fianna Place Court	2006	0.2
10	High Place	2006	0.2
11	Southfield Heights Phase II	2007	0.5
12	Ridgewood @ Rye Hill	2007	1.1
13	Brighton Place	2007(2)	0.9
14	North Pointe, Phase 1	2007	0.5
15	Woods @ Chaffee Crossing	2008	1.2
16	Debbie Addition, Phase II	2008	0.3
17	Cisterna	2008	0.5
18	Huntington Chase	2008	1.3
19	Willowbrook	2008	0.9
20	Clayton Park, Phase 1	2009	0.3
21	North Pointe, Phase 2	2009	0.3
22	Reata	2010	0.7
23	Southfield Villas	2012	0.4
24	Clayton Heights	2012	0.6
25	Walnut Park, Phase 2	2012	0.2
26	Park Meadow, Phase 1	2013	0.3
27	StoneBrook	2013	0.3
28	Stoneshire	2013	0.5
29	Borough at Middleton	2014	0.4
30	Horseshoe Ridge	2014	0.4
		Total Mileage	18.6

(1) To be resurfaced in 2016
(2) Resurfaced in 2015

CIP concerns expressed by David Armbruster 01/26/2016:

There are 450+- miles of asphalt paved streets in the city. It is estimated that approximately 20 miles of the streets should be resurfaced every year. This is based on the premise of need to resurface streets approximately every 22.5 years. Based on the CIP approximately 5 to 7 miles per year are scheduled for resurfacing over the next 5 years. Accordingly, this reflects a deficit of 13-14 miles per year. This portends a major growing problem.

Questions/Comments:

A. What plans if any are in the works to make up this deficit in resurfacing city streets?

B. Given the high cost of resurfacing streets with asphalt overlays, has there been any consideration to extending the life of streets by means other than asphalt overlays, such as seal coating and/or chip and seal which I understand is measurable less costly. Would it be possible for the engineering department to investigate this and other possible resurfacing options as a means of extending the life of existing streets and maintaining the streets. The average cost of resurfacing streets with asphalt overlays is slightly over $1,250,000.00 per mile based on cost projected in the 2016 CIP. At these costs per mile it would take $25 million annually to resurface 20 miles a year.

C. Another problem is the necessity to resurface and in some instances rework the base of failing streets 10 years or less old is diluting CIP funds from the maintenance and upkeep of older deteriorating streets. Proposed work in St. Francis Crest Addition is an example of this. Almost $1, 000,000.00 is proposed to correct the deficiency in these streets. There are other new subdivisions where this early deterioration is appears to be occurring with the same effect. I have discussed this with Mr. Snodgrass and he placed this matter on the agenda and presumable will address this problem. It has been suggested the problem is with the weight of loaded construction vehicles and sub grade weakness. If this is the conclusion should the 30 year old street construction standards be reviewed for adequacy or is there some other problem?

D. Significant CIP funds have heretofore been allocated to FCRA Development to assist with area economic development. The current CIP reflects that $6.4 million is allocated to FCRA over the next 5 years. The allocation of funds to FCRA also dilutes available funds to meet the need to resurface existing city streets. Is all of this $6.4 million allocated to the construction of the streets serving ARC Best and ACOM or does the $6.4 million include funds for future projects? How much funding has the FCRA provided for these projects? It is suggested that the financial position of the FCRA be determined prior to allocation of CIP funds once the ARC Best and ACOM projects are fully funded and before any additional commitments are made.

E. The "Jenny Lind Road-Zero to Cavanaugh" project consumes a major portion of CIP funds and is supported by other sources of funding including grants. From the minutes of the last meeting I understand it has progressed beyond the design stage and complications are involved with changes. However, is it possible to scale it back? Why is Ingersoll Avenue west of Jenny Lind Rd. proposed for improvement. There appears no need for additional right away and the surface of this street appears sound. How much is allocated for the completion of this portion of the project? Also, could this portion of the project be eliminated or delayed in favor of funding additional resurfacing of older city street.

FROM JERRY FLEMING TO CIP COMMITTEE
1/28/16

PART 1: FORT SMITH STREET CRISIS ON THE HORIZON. THE FACTS: 1 28 2016

The City of Fort Smith maintains approximately 450 miles of asphalt and 50 miles of concrete surfaced streets, excluding State highways, such as Rogers, Wheeler, Midland and certain others that are maintained by the State of Arkansas. A five-year Capital Improvement Plan (CIP) is prepared each year by the Engineering Department. That plan is reviewed by a recently created Street, Bridges and Drainage Committee, then acted upon, approved and forwarded to the Fort Smith Board of Directors for consideration and final approval. The 2016 – 2020 CIP includes about $113,000,000 ($22,600,000 annually) expected to be generated by a 1% dedicated sales tax for streets, bridges and drainage improvements. This figure does not include income from interest, grants, carryovers from prior years or other contributions. Approximately $54,000,000 (48%) of the projected 2016-2020 CIP tax revenue is planned for use on new nonresidential street and related construction and about $30,500,000 (27%) is designated for neighborhood street overlays/reconstruction. Note that 2015 projects started and carried forward are not included in the 2016 figures and no 2016 money is allocated to those projects. The 2016-2020 CIP balance of $28,700,000 (25%) is designated for drainage, engineering and miscellaneous projects. For more detailed information, see the 27 page 2016 – 2020 CIP and its accompanying notes.

The "typical life span" of an asphalt street is 20 to 30 years (*Exhibit "A" - City Engineer's report dated & received by the City Board of Directors on January 13, 2015).* This life span can be confirmed by a study of many comparable cities in all areas across the United States. In Fort Smith and elsewhere, some asphalt streets last a few years longer than the average of 25 years, but some fail prematurely in as little as 8 years – at which time resurfacing or complete reconstruction is required using local taxpayer dollars. An example of premature neighborhood street failure in Fort Smith is illustrated by the 2015 reconstruction of 90% of the Brighton Place subdivision streets (at a cost to taxpayers of hundreds of thousands of dollars) less than 8 years from the date of subdivision acceptance by the city. Another example of premature street failure (*streets scheduled for overlay/reconstruction in 2016*) is St. Francis Crest subdivision – (*cost approximately $900,000*), and *Carrington Pointe* (*cost approximately $309,000*). The average cost per mile for St. Francis Crest and Carrington Pointe is $1,346,000 per mile (*see Five Year Capital Improvement Program (CIP* for Streets, Bridges and Drainage). Why are these premature failures occurring? The chief reason given is "poor soil conditions", however, it is the belief of some that the current subdivision street construction regulations (adopted in 1985) are both too inflexible and do not reflect the apparent need for higher design standards. Additional premature street failures are already apparent in Chaffee Crossing subdivisions – in streets only about 6 years old (Photos attached). (Food for thought: An "average" mile of city street, on "average" costs $40,000 per mile PER YEAR to overlay or reconstruct IF and when that street meets a design life of 25 years (based on $1 million per mile overlay/reconstruction cost). This does not include maintenance of each mile during that same 25 year life).

Disregarding the need to maintain the estimated 50 miles of concrete streets, the city must AVERAGE overlaying or reconstructing approximately 18 miles (4%) of the 450 miles of asphalt streets every year if the street system is to be properly maintained (*see Exhibit "A"*). The mileage and cost grows each year as more miles of streets are built and accepted by the city for maintenance, such as the many miles to be built on undeveloped thousands of acres in Chaffee Crossing, and as cost per mile grows on new and overlaid/reconstructed streets built by the city increases due to "add ons" (*such as adjoining sidewalks and trails, landscaping, additional drainage structures, etc.*).

The current cost to resurface or reconstruct a *typical* two lane street (including failed accompanying drainage systems, some curbing and other improvements) runs from as low as $825,000 to $1,300,000 per mile. The *average cost* of the 29 overlay/reconstruction projects, totaling 5.2 miles, as listed on page 5 of the notes to the 2016-2020 CIP is $1,255,000 per mile, for a total of $6.5 million dollars. In 2016 there will be a shortfall of at least 13 miles in neighborhood asphalt street overlays and/or street reconstruction. A review of the past 10 years of actual neighborhood street overlay/reconstruction reveals that an annual maintenance shortfall of this magnitude is typical. For the past 10 years the city has been falling behind – accumulating, failing to adequately maintain - an average of about 13 miles per year (130 miles or 29% of the total asphalt streets over this 10 year period). Those additional miles should be added to this calculated current shortfall. There can be little doubt that unless there is a major reallocation of 1% sales tax funding dedicated for streets, bridges and drainage infrastructure, or unless there is a major tax increase to fund these huge accumulating street repairs, the city streets will, within a few short years, become a major liability of a magnitude far greater than current millions in neglected fire and police retirement pension funding and even approaching the magnitude of the current "sewer" debacle. Without a reallocation of the 1% street funding the taxpayers will, with a very high degree of certainty, be faced with unfunded hundreds of millions in major street repairs in the coming years and a call by the city for a huge tax increase (equivalent to 2 or 3% additional sales tax) to pay for the neglect.

The typical annual application of about 7 million dollars (versus the 18 million required) to maintain an estimated 450 million dollar (450 miles x $1 million per mile) deteriorating asset is NOT a solution to the developing crisis. For years the city has applied a "band aid" fix to this problem and is currently just "kicking the problem down the road".

Part 2 will present some conclusions and possible solutions.

Exhibit "A"

From: Gosack, Ray
Sent: Tuesday, January 13, 2015 8:34 AM
To: Andre' Good; Andre' Good (good4ward2@gmail.com); Dingman, Jeff; Don Hutchings; George Catsavis (georgecatsavis@gmail.com); Keith Lau (Keithlaward1@gmail.com); Mike Lorenz (DirectorLorenz@hotmail.com); Sandy Sanders (SSanders@FortSmithAR.gov); Settle, Kevin (Board of Directors); Tracy Pennartz
Cc: ssnodgrass@fsark.com
Subject: FW: Street Overlay/Reconstruction Information

Below is information about street overlay costs which Stan Snodgrass has provided to Jerry Fleming at his request. I understand that Mr. Fleming has been in touch with some (or perhaps all) of you. I wanted to make sure you have the same information Mr. Fleming has received.

Ray

From: Snodgrass, Stan
Sent: Tuesday, January 13, 2015 8:30 AM
To: Gosack, Ray
Subject: Street Overlay/Reconstruction Information

Ray,

I was relooking at some of my numbers regarding the street overlay/reconstruction projects. As you are aware, we don't just do a typical asphalt overlay. Our work on these projects includes repair/replacement of failed drainage systems (pipes, inlets, concrete swales), curbs/gutters, concrete aprons/fillets, failed base course, roadside channel improvements (including installation of concrete ditch pavement and culverts where needed), concrete slope pavement on steep side slopes, etc. All these additional improvements significantly increases the cost of the overlay project compared to just an asphalt overlay.

For a typical 2 lane street, our current cost is about $825,000 per mile. Obviously this can vary depending upon the width of the street. There are 500 miles of city maintained streets.

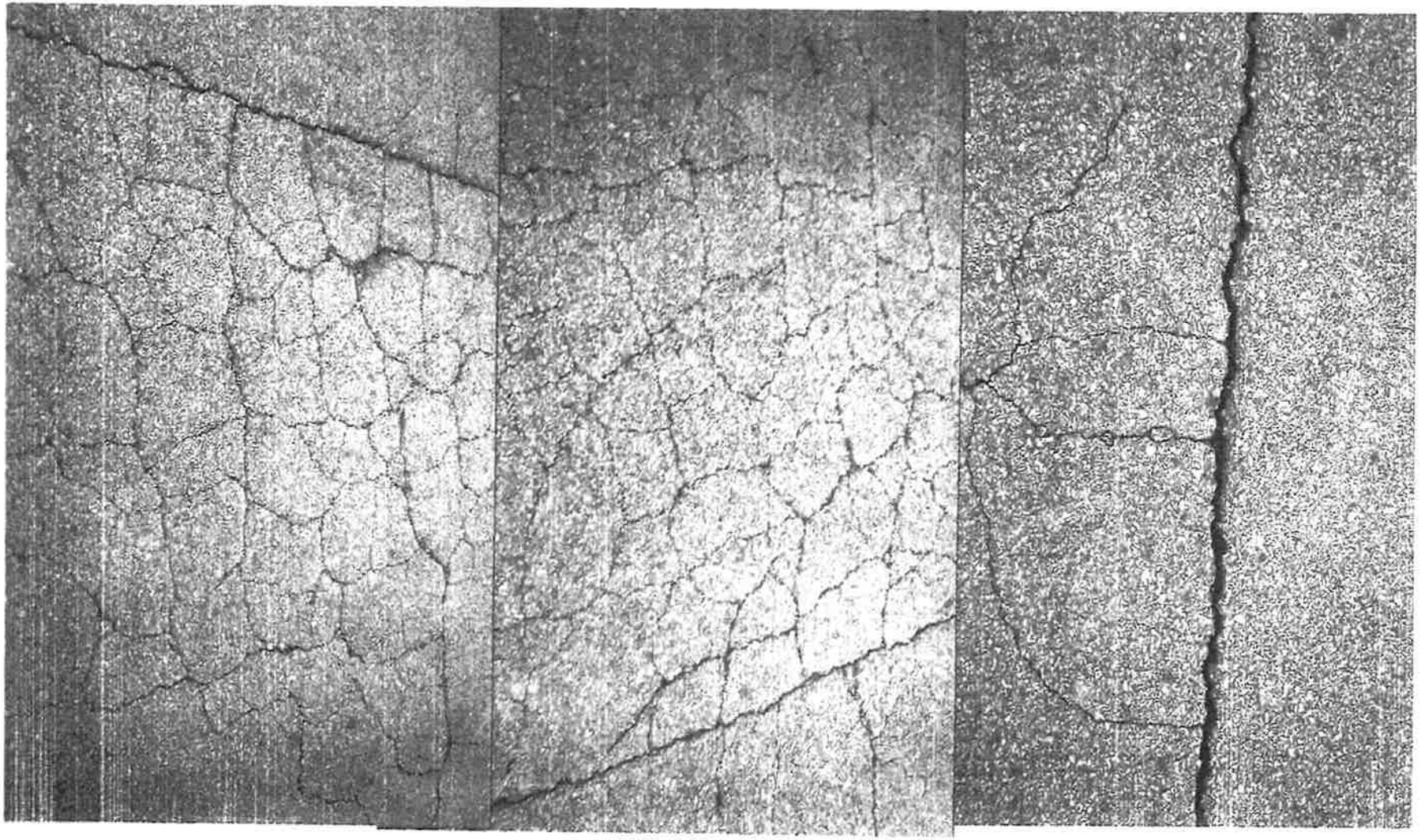
On the very conservative end, let's assume a cost of about $700,000 per mile (this is about 15% less than what our current projects are costing). A typical life before you have to resurface an asphalt street is between 20 and 30 years.

A 20 year design life would equate to 25.0 miles/year for an annual expense of $17.5 mil

A 30 year design life would equate to 16.7 miles/year for an annual expense of $11.6 mil

Given some of the upcoming larger projects, we are currently only programming about $6 mil per year

Stan



PHOTOS TAKEN JANUARY 28, 2016 CHAFFEE CROSSING STREETS LESS 6 YEARS OLD OR LESS

INCLUDES RANDOM SELECTIONS FROM 4 OF SUBDIVISIONS connected to Massard Street.

SOME OF THE DAMAGE IS ON REATA STREET, WOODHAVEN CIRCLE (Reata subdivision streets (5 or 6 years old) are in the poorest condition – entire subdivision needs immediate sealing of streets to avoid total overlay or reconstruction within 5 years).

GENERAL DARBY LANDING (in Cisterna Village which was in the best condition of the 4 subdivisions inspected)

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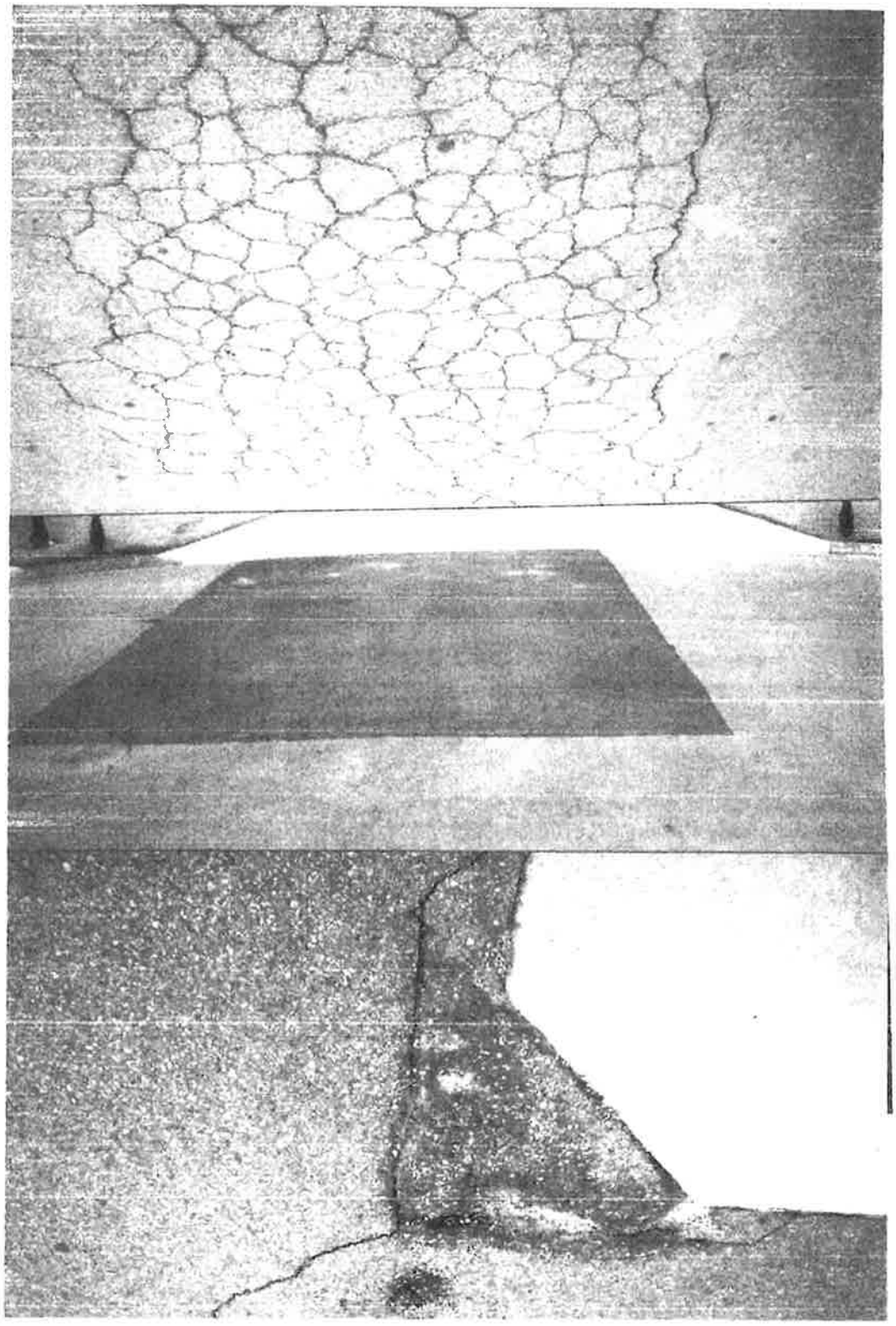

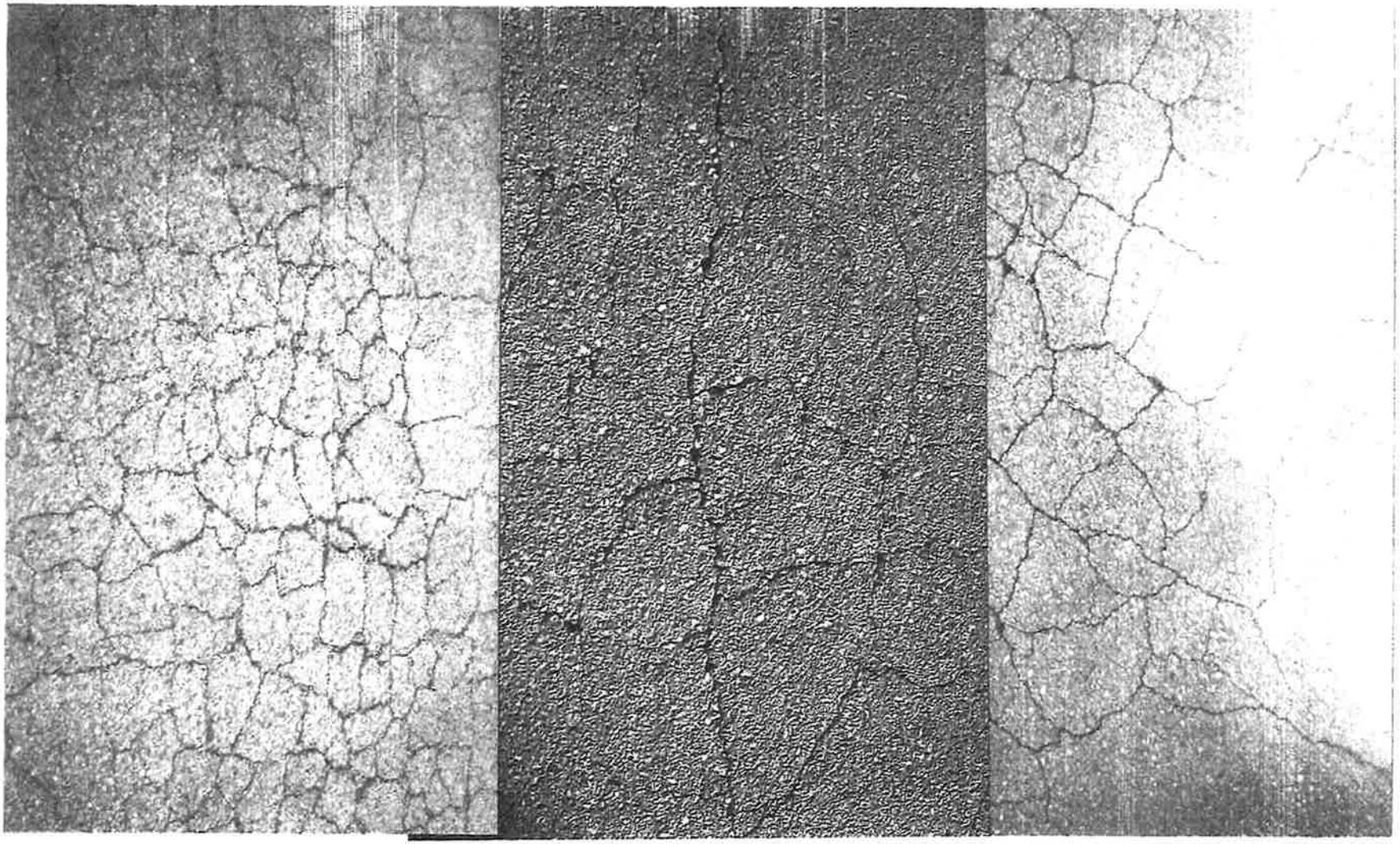

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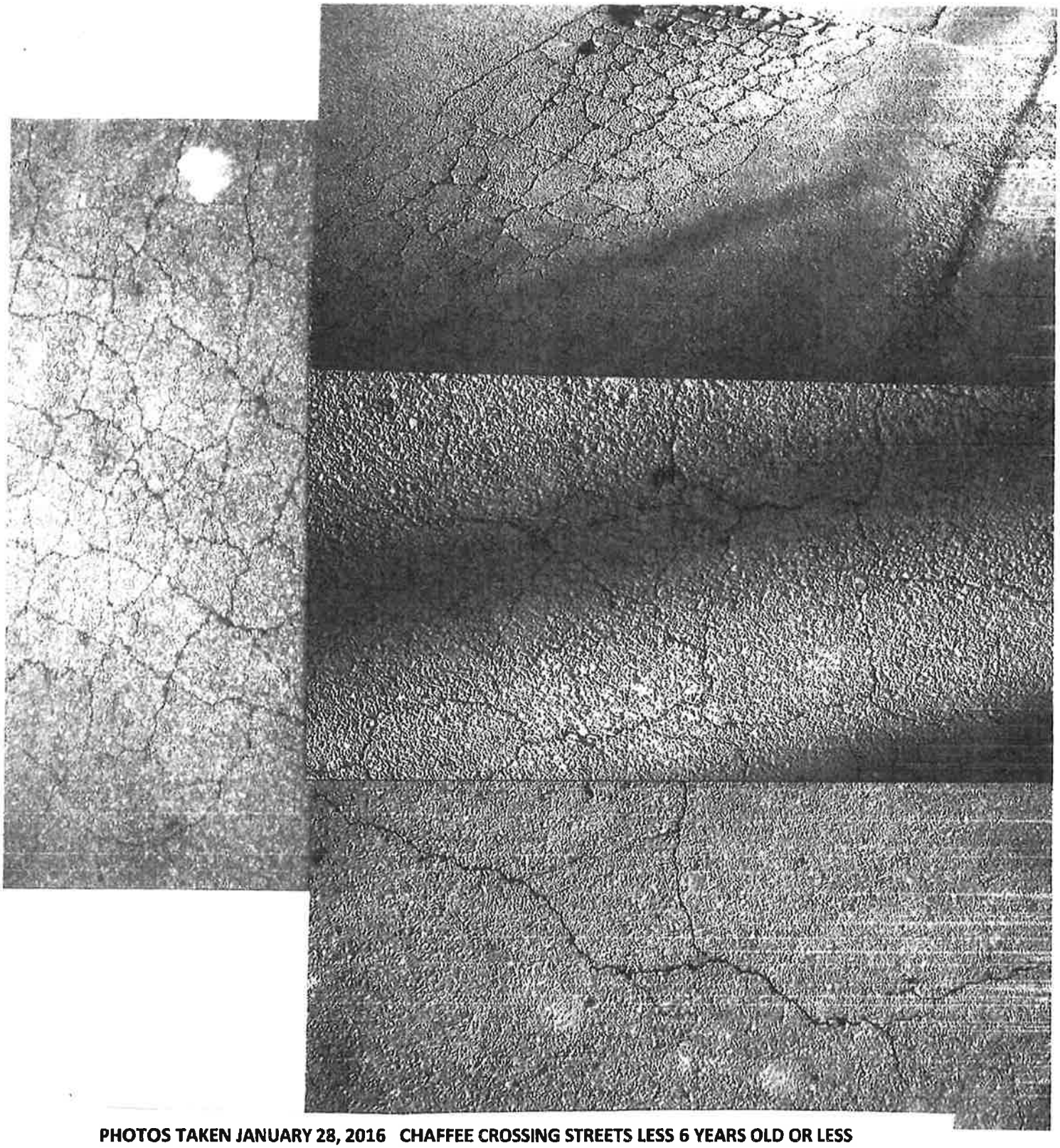

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PART 2: FORT SMITH STREET CRISIS ON THE HORIZON SOLUTIONS 1 28 2016

The 1% sales tax dedicated for streets, bridges and drainage (approved by the voters in 2015) is projected to yield about $21.5 million in 2016 and gradually increase to $23.7 million annually in 2020. $6.5 million (30% of the $21.5 million tax money) has been allocated for 5.2 miles of neighborhood street overlays and reconstruction in 2016.

The only current source of additional funding for overlays/reconstruction must be found within the approximately 70% (or $15 million) in the 2016-2020 CIP that is currently allocated toward other street, bridge and drainage and related projects.

Due to the current structuring of the CIP it is possible but somewhat difficult to determine how much money is allocated out of current funding in a particular year versus how much funding is being carried over from projects not completed in prior years.

What one can do is look at several of the past five year CIP's as well as look at the forward years in the current 2016-2020 CIP and determine some trends.

In 2016, $1,091,000 is allocated for overlays or new streets in Chaffee Crossing ($2,054,000 less a footnoted FCRA contribution of $863,000). In 2015 the share paid by the city for streets in Chaffee Crossing totaled $872,538 ($1,348,077 less a footnoted contribution from the FRCA in the amount of $475,539). Looking at prior and the current 5 year CIP it appears the city is spending or will be spending around $1,000,000 annually to build new streets in Chaffee Crossing. This figure does not include potential street overlays/reconstruction of miles of existing Chaffee Crossing streets. Each year the CIP automatically projects a minimum of $1,000,000 for Chaffee Crossing streets/bridge and drainage projects (See Attached 2016 Five Year CIP). This amount is in addition to "contributions" made to the city by the Fort Chaffee Redevelopment Authority. The city is now in a position of being responsible for maintaining all of Chaffee Crossing streets initially constructed with millions of 1% sales tax funding as well as all maintenance on these and other miles of residential streets built by others in that area. Is it possible that after 17 years the Fort Chaffee Redevelopment Trust has "turned the financial corner" and should now be expected to gain sufficient income annually from land sales (and other income sources) to provide all the funding for construction of new streets (other than those built and paid for by others in neighborhood or other developments) in Chaffee Crossing? Did taxpayers expect to indefinitely fund new street construction in Chaffee Crossing when the city gave the 7000 acres to the Trust to develop and sell? What were and what are the expectations as we move forward, as thousands of acres and dozens of miles of streets, bridges and drainage projects remain to be built on that acreage?

Can the 1% dedicated sales tax be expected to maintain 450 miles of asphalt streets, and use diverted money to build miles of new streets on thousands of acres as well as revitalize the downtown area with millions of dollars in new connecting roads? Is this what taxpayers who voted for the 1% dedicated sales tax intended?

Let me be clear about this: This writer is NOT "against" the Chaffee Crossing development; This writer is NOT opposed to further development, redevelopment and maintenance of streets in and toward the "downtown" area. This writer is NOT opposed to "economic development". This writer IS opposed to a deliberate policy of street building and street maintenance that is sending a basic city infrastructure into ruin. This writer is opposed to a policy of "economic development" that fails to consider the impact of that development on all other infrastructure sectors. It is past time to look at reallocating tax money toward an already burdened neighborhood street system that is rapidly growing and spiraling downward. We are already facing hundreds of millions in debt due to failure to address various obligations (the sewer crisis, the fire/police pension crisis, the ongoing convention center financial drain, and so forth) – ALL due to lack of positive planning ahead by the city government. Let's not continue the policy of burying our heads in the sand and hoping the problem goes away. It won't.

Nothing is being planned or even considered by the city government to overcome the 13 mile (or more) annual short fall in overlays/reconstruction of neighborhood streets. In fact, to the contrary, last year most of the City Directors, the Mayor and others supported a plan to divert millions of the already over extended 1% dedicated sales tax money for uses other than maintenance and reconstruction of existing streets, bridges and drainage improvements in spite of clear and written knowledge of the street maintenance deficit. Fortunately, the taxpayers wisely and overwhelmingly rejected that diversion.

What are some possible alternatives to burying our heads in the sand and continue charging toward street infrastructure disaster? None are pleasant and all are going to meet resistance.

1. **A line by line deep analysis of the current Capital Improvement Plan in preparation for the 2016-2020 plan to be approved by the city Board of Directors in the Fall. Emphasis will need to be on increasing funding for neighborhood street maintenance/overlays/reconstruction.**
2. **A short temporary moratorium on specific selected spending for proposed but optional street projects (those already in the pipe line) as well as a temporary hold on spending for any new or proposed street related projects not already "in the pipeline". For example, (and this is only an example), complete the Spradling extension project but delay the Kelly extension and the North B Truck Route project. Advocate a moratorium on using 1% dedicated sales tax toward the ity building new streets in Chaffee Crossing on the basis that after 17 years it is time for the Fort Chaffee Redevelopment Trust to become self-supporting with income from the sale of the remaining thousands of acres and dozens of buildings it was given in 1997. Or, at the very least, require the Trust to produce evidence that it cannot "go it alone" with respect to street, bridge and drainage infrastructures.**
3. **Request the Engineering Department provide a comprehensive street maintenance and management plan based on current street conditions. This would involve a street**

inventory classifying streets as to their expected life and current condition. Advocate a change of policy from "worst streets first" (recognized by some as the "worst" policy of all) to a maintenance management plan that extends the life of dozens of miles of streets 5 to 8 years PRIOR to failure and without an overlay or reconstruction.

4. Request reallocation of existing funds to provide for a temporary extension of life (5 to 8 years or more) for as many miles as possible on streets that are on the cusp of falling into the category requiring immediate overlay/reconstruction. This extension is possible by extensive use of a number of alternative applications to the existing asphalt – such as slurry, seal coat or many other methods that are proven in other cities to be effective and much less expensive than an overlay or reconstruction. The use of a seal coat rather than an overlay could result in as much as to 10 to 20 times more street mileage receiving an extended life each year. The purpose of temporarily extending the life of streets is to provide immediate attention to streets that have not failed but will fail more quickly without immediate attention. The result should be more miles of annual preventive maintenance to provide more time to eventually "catch up" with the already existing street maintenance deficit. A second purpose would be to establish a permanent maintenance management plan to continue these applications as needed for prudent street management in the future.
5. Advocate new subdivision street, bridge and drainage minimum construction standards that provide for at least a 25 to 30-year design life with flexible regulations that provide for differing construction based on soil and potential traffic conditions. We could at the very least do a study to determine the cost of increasing our current design life from 20 to 25 and 30 years. "One size fits all" street construction regulations results in premature failures in poor soil and certain other conditions. Our present subdivision street design regulations were adopted over 25 years ago and need a thorough review and revision to meet our current and future needs. Construction techniques and materials have changed over the years and these changes need to be considered for implementation into rewritten regulations. Taxpayers should not be paying millions of desperately needed dollars to rebuild subdivision streets due to premature failures or short design life.
6. Promote a critical analysis of the current CIP and make some difficult decisions regarding all foreseeable street, bridge and drainage projects. This would no doubt result in the delay of some projects and perhaps eliminate others. This will involve some decisions that will be politically unpopular. Although considerable input would be needed from the Engineering Department, a "neutral" citizen's committee (perhaps the current CIP Advisory Committee) should make the final recommendations which would then be presented to the Board of Directors for review and action.
7. Implement the new plan and monitor it closely for effect. Prepare a flexible procedure for change as circumstances warrant.
8. Write your suggestions here! The writer is no expert in these areas and fully expects that more and better ideas and possible solutions will be forthcoming by those better

qualified. One objective of this writing is to gain acknowledgement and attention by others that a crisis is rapidly developing with respect to our city streets and thus gather support toward doing something, anything, to save our street system.
It is hoped this writing will stimulate interest and discussion regarding an overlooked but vital part of the city infrastructure.

We are facing a crisis that is not going to go away. Practically ANY plan is better than to just continue spiraling downward. We simply cannot AFFORD to continue the current street policies. It appears that almost everyone in a position of authority and/or influence is either unaware or choosing to ignore the situation. Let's meet the challenge now – not on a broken street system a few years from now!

January 28, 2016 Addendum to Parts 1 and 2: FORT SMITH STREET CRISIS ON THE HORIZON

What are SOME of the main factors determining the life span of an asphalt paved street and what can be done to lower cost and increase maintenance capabilities.

1. **Strong street construction regulations applied to proposed new streets that take into consideration the specific site (rather than "one size fits all" regulations). Subdivision street regulations designed to see that streets are built to meet the soil and traffic conditions found or expected in the area.**
2. **Scheduled inspections and pavement preservation maintenance policies on all streets.**
3. **Prevention of water intrusion through, under or around the perimeter of the asphalt.**
4. **Crack filling, chip and seal and/or seal coating surface cracks at an early stage of maintenance – life extension maintenance.**
5. **Vehicle weight limits.**
6. **Discontinue (if in use) a "worst first" street maintenance management policy and implement a street preservation policy. A "Worst first" is politically popular simply because the public can see immediate improvement to already damaged streets. The fact is that most voters are generally not concerned about maintenance of streets until there is a "pothole" in the street in front of their home. Numerous studies have shown that a "worst first" strategy is a very poor strategy and that it is eventually the most costly approach of all. This is particularly true when there is no concerted plan to maintain streets before they begin to break down. When "worst-first" is the street management policy, structural damage has already occurred to the streets and far more expensive street rehabilitation/reconstruction is required. Perhaps a good example of using the "worst first" policy is in year 2016. Several subdivisions in Chaffee Crossing are evidencing premature failure and unseen structural damage is no doubt occurring as water penetrates the deteriorating asphalt and comes in contact with the base and sub base materials. Once structural damage occurs, pavement preservation is no longer a viable option. A way must be found that provides for street life extensions before the need for**

overlays or reconstruction when funds are not available to annually overlay or reconstruct all streets that have meet their design life or as needed. Many large and small cities across the United States have adopted pavement preservation programs. A properly executed pavement preservation program will yield the desired results of better roads, expenditure of fewer maintenance dollars allocated to reconstruction and overlays, less damage to vehicles and improved traffic flow. Pavement preservation through preventive maintenance is considered the key to maximizing budget dollars and involves a shift from "worst-first" to "optimum timing" for preservation maintenance.

The Fort Smith 1% sales tax dedicated for streets, bridges and drainage is simply not adequate to provide annual funding necessary to overlay the required 18 miles or more of city streets. Fort Smith must find a coherent effective and efficient way to preserve more miles of city streets for far less than the current average of about $1,000,000 per mile – or 6 or 7 miles annually.

There are several immediately effective partial solutions:

1. **Recognize that the 1% sales tax funding is not adequate to support all the existing street, bridge and drainage projects on the current 2016- 2020 CIP and recommend a re-allocation of funding toward street preservation and away from nonessential projects.**
2. **Recommend that a strategy be implemented with emphasis on preservation of existing streets with less money applied to overlays and reconstruction and more money applied to extending the life of existing streets for 5 to 8 years with the use of seal coats, chip/seal, slurry and other treatments where practical. This will be particularly productive for streets that are not on the "worst case first" list.**
3. **Recommend that the current street construction standards be rewritten in such a manner that street construction requirements will depend on actual site conditions and provide for a design life of no less than 25 years or 30 years.**
4. **Recommend a moratorium on funding new streets in Chaffee Crossing – on the basis that after more than 10 years of subsidizing street development in that area it is time for the Fort Chaffee Redevelopment**

Trust Authority land sales income to provide the funding necessary to build the streets, bridges and drainage structures or, at the very least, financially justify every request for a subsidy from the 1% dedicated "street" tax funding.

5. Recommend a temporary short term moratorium on all new street and drainage projects. Place on hold all non-essential projects that are already "in the pipeline" – with exceptions where deemed financially prudent.
6. Recommend redeployment of Engineering Department assets by placing someone accountable and in charge of seeking state and federal funding via grants to construct streets, sidewalks, street trails, bridges and drainage structures that often are a part of development.
7. Recommend the Engineering Department investigate practices and procedures of other cities to determine whether the most effective local street preservation/management standards and policies are in place. Consider computerized models that help prioritize which streets can benefit from a life extension application of different materials, such as seal coating, chip and seal, slurry, crack filling, etc. in addition to overlays or reconstruction.
8. Work with the Engineering Department to come up with a more informative easy to understand format for the 5 year CIP document.
9. Upon reaching a consensus on the extent of the crisis, continue to gather information necessary to formulate a working strategic plan, complete with goals, then implement the plan and follow up regularly, making adjustment as necessary to reach stated goals.
10. YOUR recommendations go here! The writer is not expert on the subject. The objective is to raise awareness to the challenge confronting the city.

This is not a simple task, but it is not an unusual task. Basically the "wants" exceed the resources. Recognize this as a fact. Some unpopular cuts MUST be made. Every entity affected by a proposed cut in their "project" will resist with vigor. Be prepared to defend your position and trust that there will be enough support from those with the best long term interest in the city. Good luck.

This is A 27 Page Document with extensive notes which must be Read To understand the numbers!

CITY OF FORT SMITH

As Amended 10/21/15

Five-Year Capital Improvement Program for Streets, Bridges and Drainage (2016-2020)

		2015	2016	2017	2018	2019	2020
	Beginning Balance	28,153,502	28,854,231	20,936,441	6,834,498	2,765,596	932,404
	Current Year Revenues						
	Sales Tax	21,011,900	21,537,198	22,075,627	22,627,518	23,193,206	23,773,036
	Grants/Other Participation	525,081	5,053,630	2,165,429	0	0	0
	Interest	99,542	111,564	63,854	23,940	9,222	2,815
	Total - Current Year Revenues	21,636,523	26,702,391	24,304,911	22,651,459	23,202,428	23,775,851
	Total Funds Available	**49,790,025**	**55,556,622**	**45,241,352**	**29,485,956**	**25,968,024**	24,708,255
1	Street Overlays & Reconstruction	7,834,300	7,199,594	7,415,264	8,000,000	8,000,000	8,000,000
2	Neighborhood Drainage Improvements	3,918,582	6,316,670	6,500,000	2,015,000	2,000,000	2,000,000
3	Town Branch / Camall Drainage	2,769,876	0	0	0	0	200,000
4	North B Truck Route	20,000	1,024,000	700,000	0	0	0
5	Intersection and Signal Improvements	509,921	825,000	570,000	400,000	400,000	400,000
6	Spradling Extension at Riverfront Drive	0	1,405,000	0	0	0	0
7	Kelley Highway Extension to Riverfront Drive	350,000	800,000	677,000	3,000,000	4,000,000	0
8	Jenny Lind Road - Zero to Cavanaugh	296,745	10,132,540	12,000,000	7,015,000	0	0
9	Geren Road Reconstruction	150,000	1,213,000	5,325,000	0	0	0
10	Zero Street (Hwy 255)	0	0	0	800,000	0	4,000,000
11	May Branch Drainage Project	0	300,000	800,000	1,000,000	6,000,000	5,000,000
12	Levee Certification & Repair	266,293	0	0	0	0	0
13	Streetscape - Towson Avenue	105,000	0	0	0	0	0
14	FCRA Development	1,348,077	2,053,977	1,000,000	1,000,000	1,000,000	1,000,000
15	Hwy 45 widening south of Zero	0	0	0	0	0	200,000
16	Railroad Crossing Panels	301,940	160,000	160,000	160,000	160,000	160,000
17	Item Deleted. Funds transferred to item 1	0	0	0	0	0	0
18	Traffic Studies	21,016	25,000	25,000	25,000	25,000	25,000
19	Overlays/Drainage by Street Department	188,560	200,000	200,000	200,000	200,000	200,000
20	Engineering Dept. and Other Depts.	2,698,000	2,765,400	2,834,500	2,905,360	3,050,620	3,126,890
21	Contingency	157,484	200,000	200,000	200,000	200,000	200,000
	TOTAL	**20,935,794**	**34,620,181**	**38,406,854**	**26,720,360**	**25,035,620**	24,511,890
	Ending Balance	**28,854,231**	**20,936,441**	**6,834,498**	**2,765,596**	**932,404**	196,365

Grants/Other Participation

Jenny Lind Road - Zero to Cavanaugh	49,542	4,000,000	2,165,429	0	0	
Streetscape - Towson	0	190,641	0	0	0	
FCRA	475,539	862,989	0	0	0	
TOTAL	**525,081**	**5,053,630**	**2,165,429**	**0**	**0**	